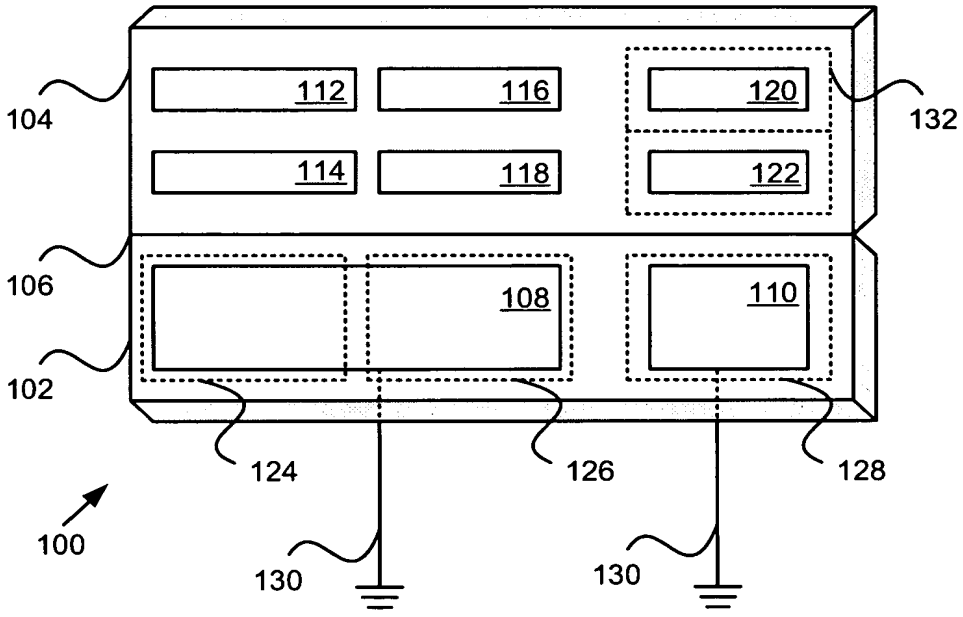

104
112
116
120
132
114
118
122
106
108
110
102
124
126
128
100
130
130

Figure 1

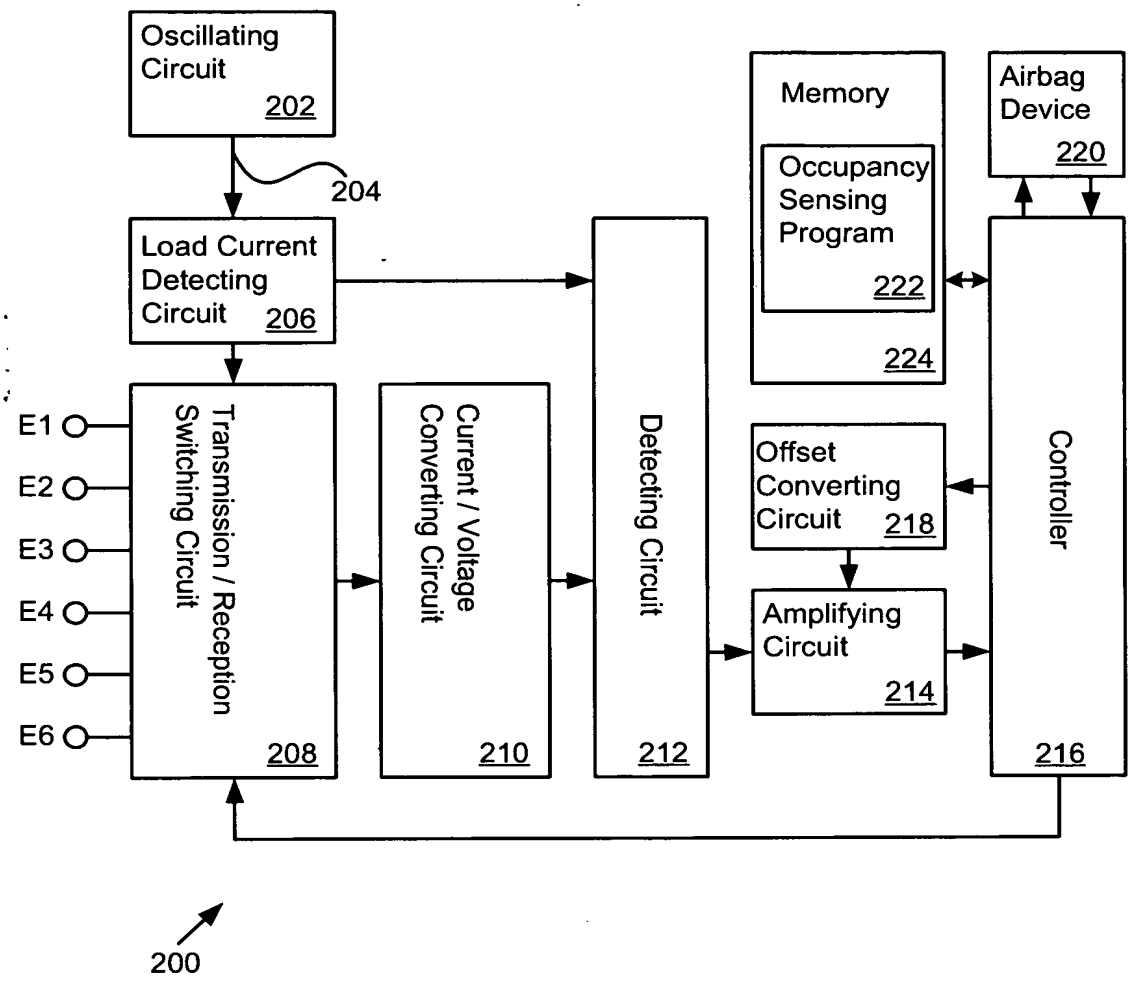

Oscillating Circuit
202
204
Load Current Detecting Circuit
206
E1
E2
E3
E4
E5
E6
Transmission / Reception Switching Circuit
208
Current / Voltage Converting Circuit
210
Detecting Circuit
212
Memory
Occupancy Sensing Program
222
224
Airbag Device
220
Offset Converting Circuit
218
Amplifying Circuit
214
Controller
216
200

Figure 2

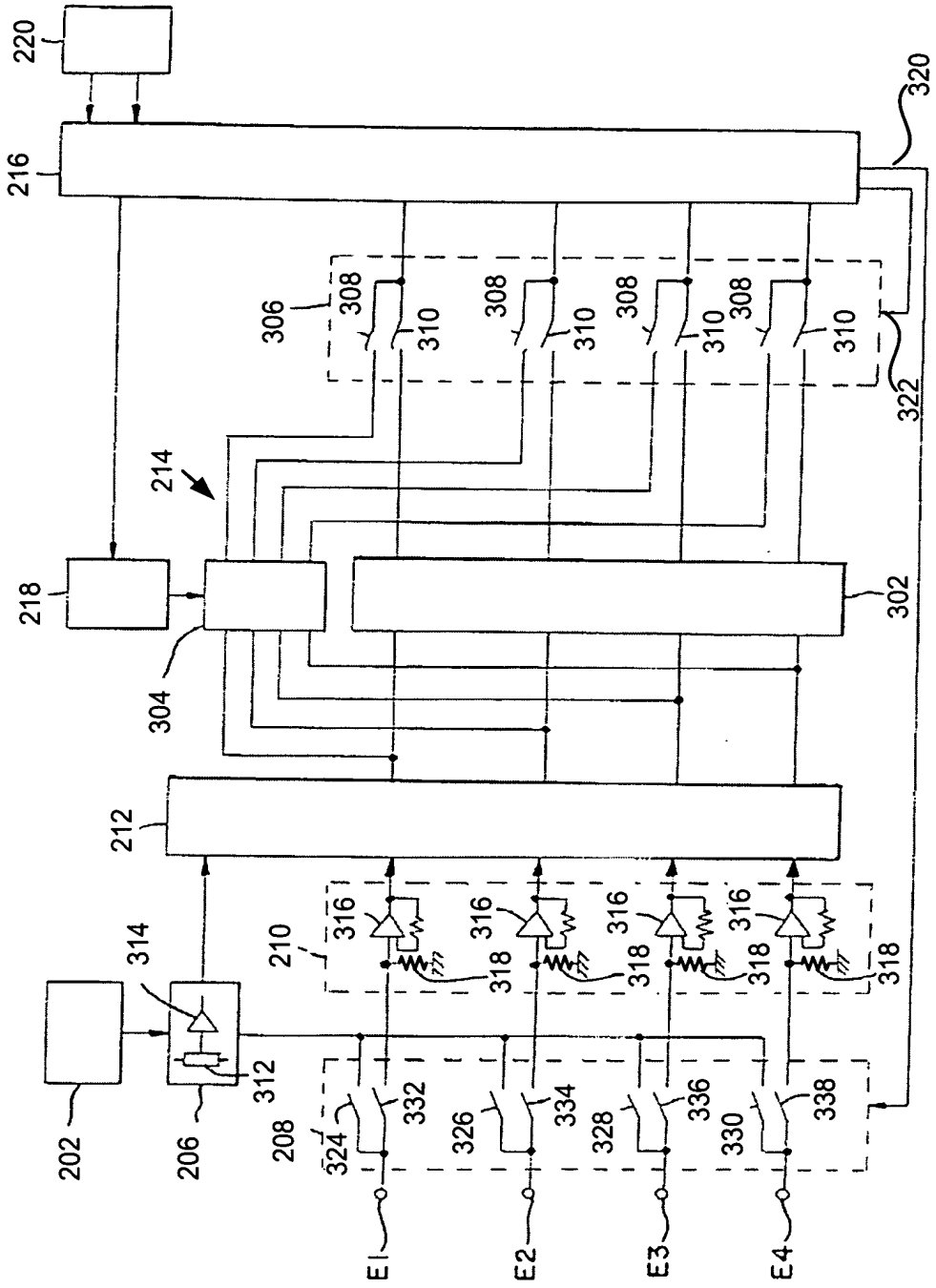

220
216
320
306
308
310
322
214
218
304
302
212
210
316
318
314
312
202
206
208
324
332
326
334
328
336
330
338
E1
E2
E3
E4
300

Figure 3

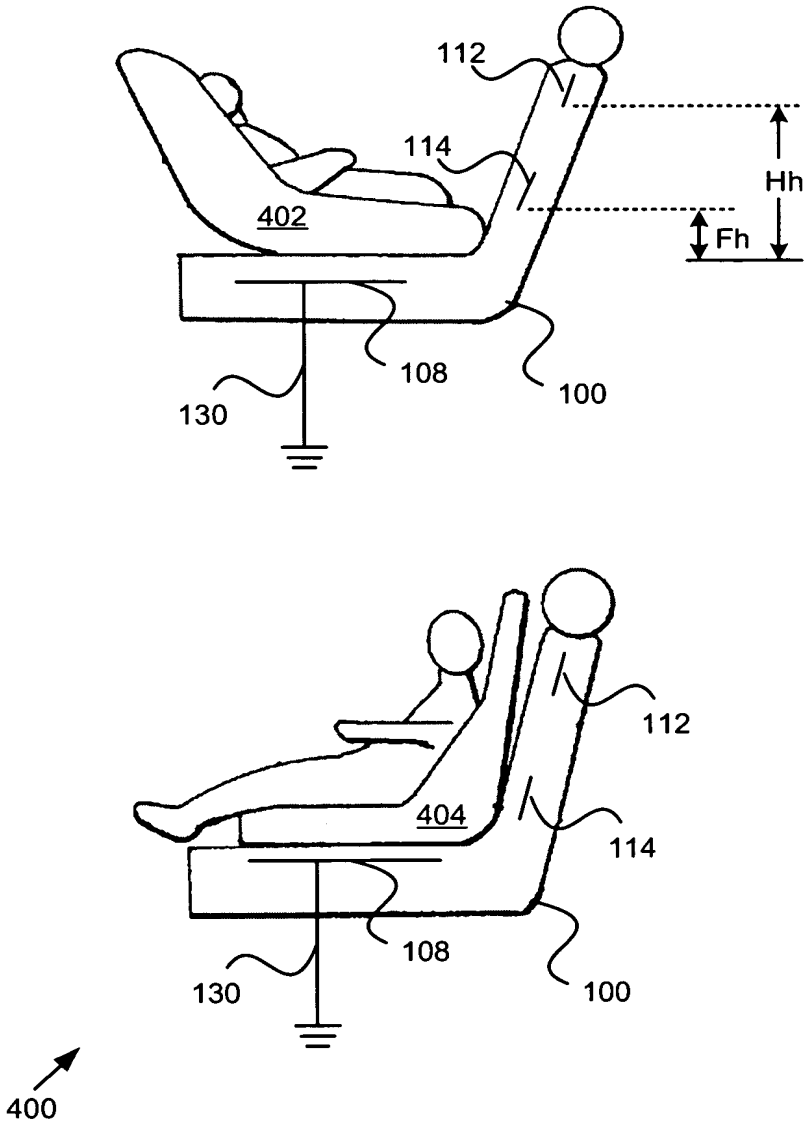
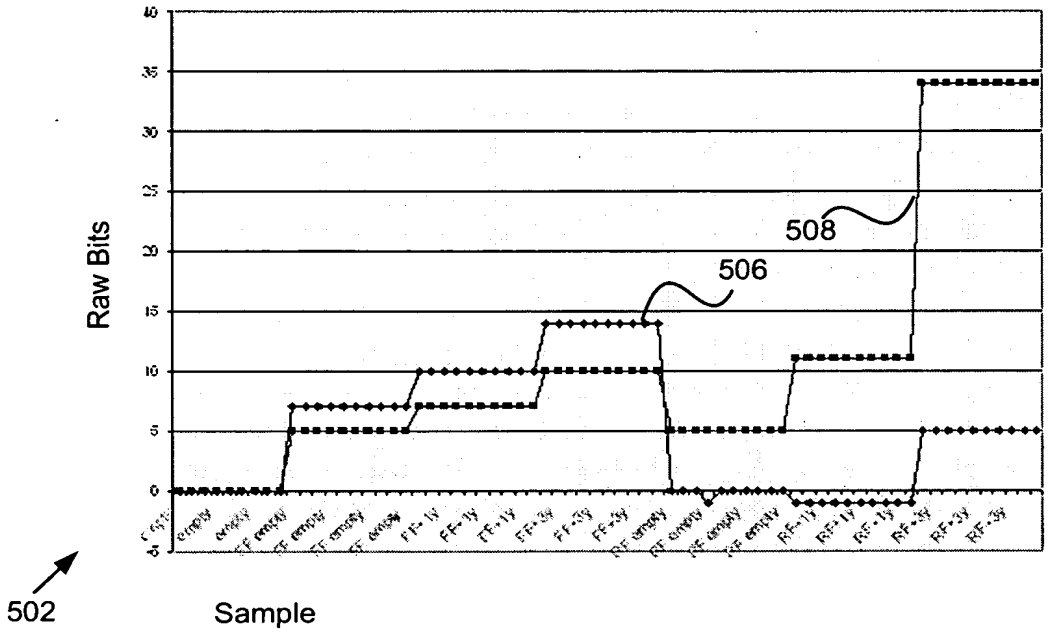


Figure 4


Raw Bits
508
506
Sample
502

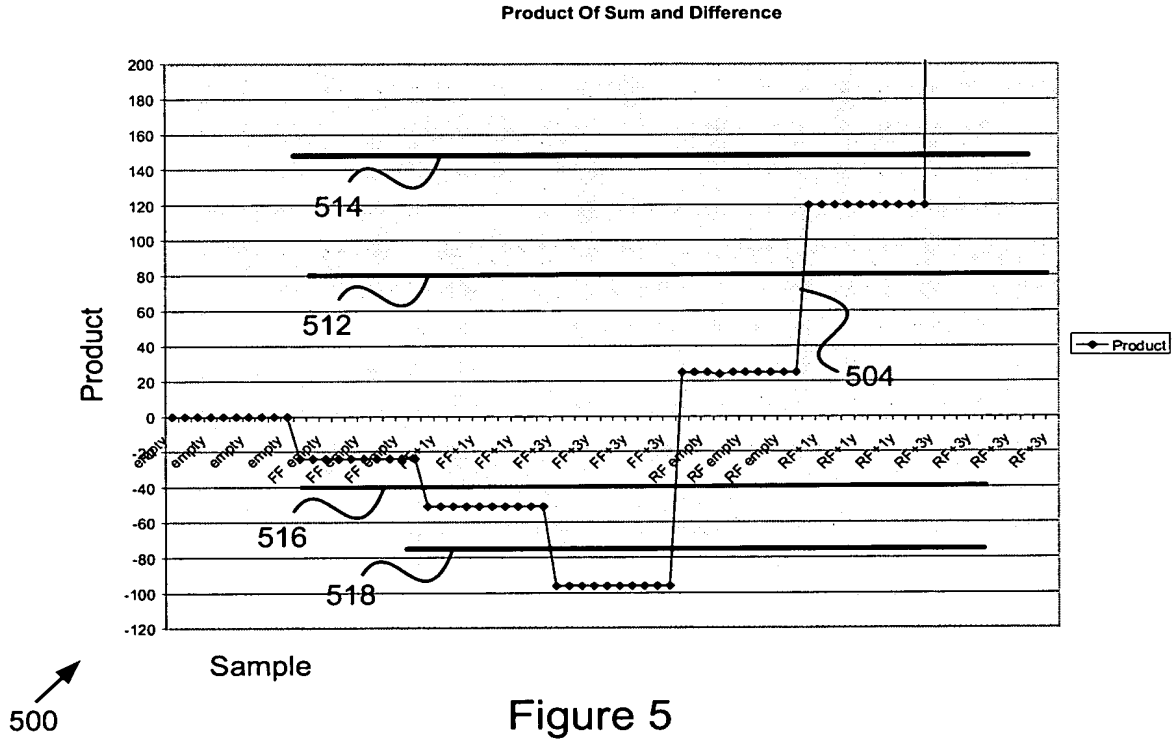

Product Of Sum and Difference
Product
514
512
504
516
518
Product
Sample
500

Figure 5

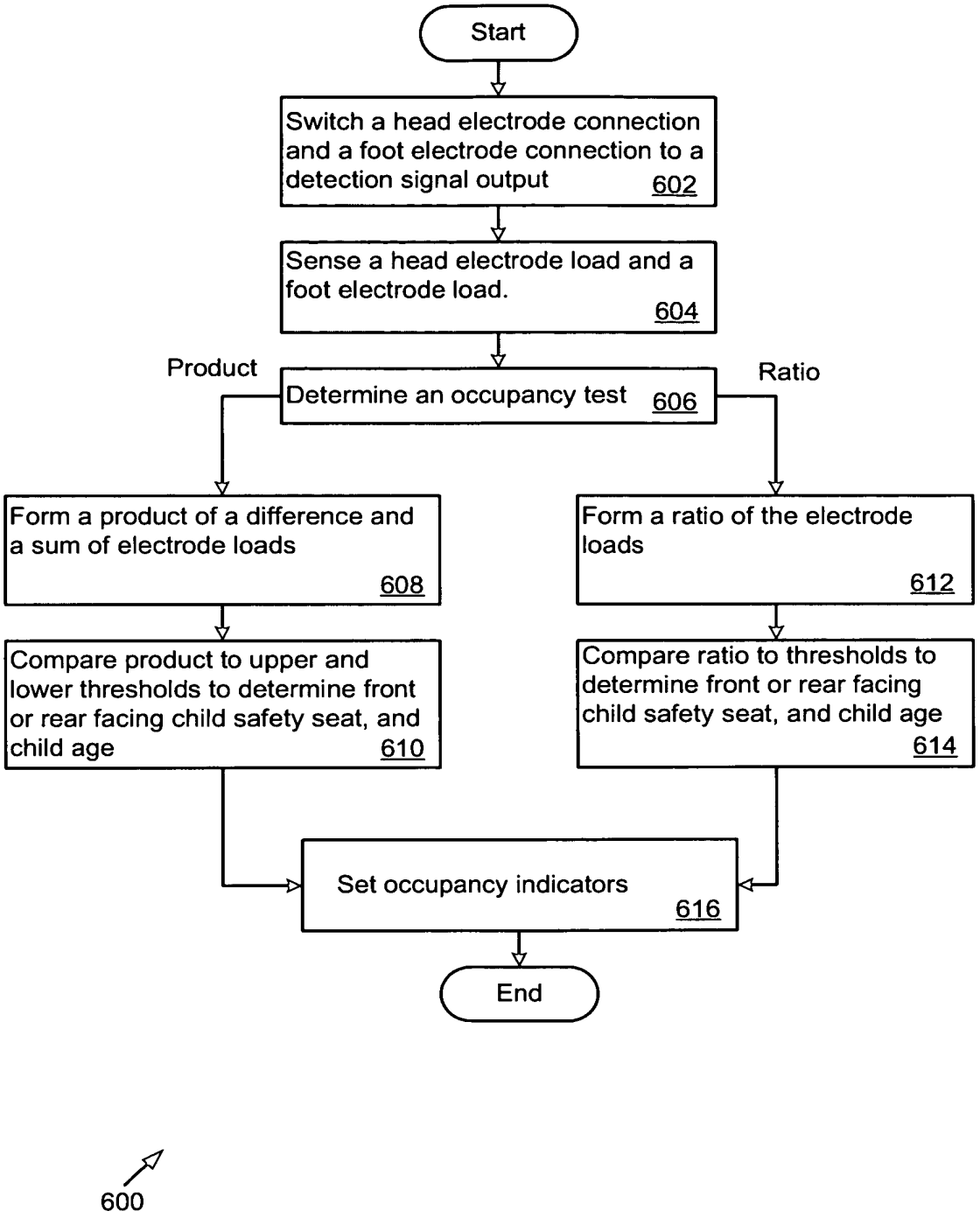

Start
Switch a head electrode connection and a foot electrode connection to a detection signal output 602
Sense a head electrode load and a foot electrode load. 604
Product
Determine an occupancy test 606
Ratio
Form a product of a difference and a sum of electrode loads 608
Form a ratio of the electrode loads 612
Compare product to upper and lower thresholds to determine front or rear facing child safety seat, and child age 610
Compare ratio to thresholds to determine front or rear facing child safety seat, and child age 614
Set occupancy indicators 616
End
600

Figure 6